

Deluxe heat



PERFORMANCE SERIES

Single Zone & Multi-Zone Ductless Systems

Year Round Heating & Cooling





Heating & Cooling at any Temperature

Deluxe Heat Single Zone (DHSZ) and Multi-Zone (DHMZ) models operate at outdoor temperatures as low as -22°F, and as high as 122°F; providing an ideal solution for installations that require year round heating and cooling.

Deluxe Heat series offers advanced technology and built-in low ambient controls versus conventional systems.



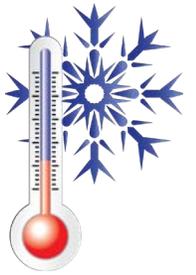
***Perfect for residential and light commercial spaces such as:
data centers/server rooms, meeting/conference rooms, gyms, and more...***



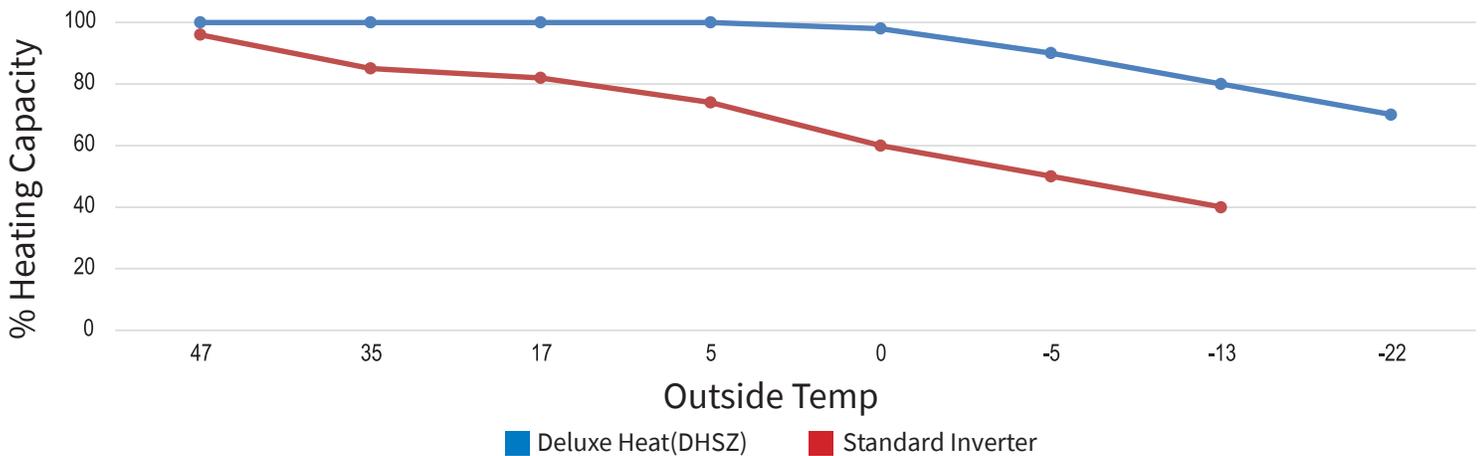
Maintains Comfort in Extreme Conditions

Low Ambient Heating Operation with 100% Heating Capacity at 0°F. (DHSZ Models)

When outdoor temperatures are below freezing - Deluxe Heat provides the perfect solution for residential and light commercial installations, maintaining the desired indoor temperature.



Deluxe Heat vs. Other Inverter Units



Average Heat Pump operational data, based on nominal capacity range. Contact EMI for complete operational details.



Efficient High Capacity Year Round Heating & Cooling

The perfect solution for homes or light commercial applications with hydronic heat that require cooling or heating in multiple zones.

Air Handlers “Free Match”

The Deluxe Heat series offers free match flexibility. High Wall Air Handlers (DHWAL) and Ceiling Cassette Air Handlers (CASH) are compatible with both Single Zone (DHSZ) and Multi-Zone (DHMZ) condensers.



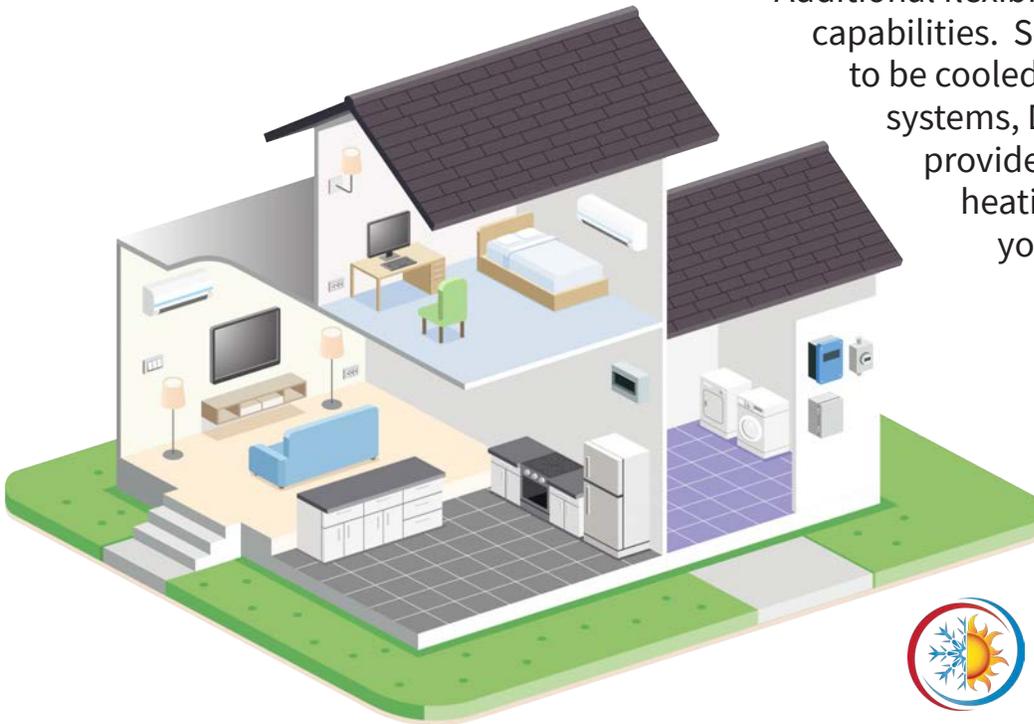
High Wall Air Handler (DHWAL)



Ceiling Cassette Air Handler (CASH)

Multi-Zone

Additional flexibility with multiple zone capabilities. Sometimes only one area needs to be cooled or heated. Unlike traditional systems, Deluxe Heat Ductless Systems provide low cost and energy efficient heating and cooling exactly where you want it without the need for expensive duct work and noisy machinery - providing the perfect solution for homes or businesses of any size.



- 2 Zone 18,000 Btu/h
- 3 Zone 27,000 Btu/h
- 4 Zone 36,000 Btu/h

Inverter - Variable Speed Compressor Technology



Intelligently heats and cools without wasting energy - good for your wallet and the environment.



Compressor continuously adjusts speed to match your desired comfort level - speeding up to quickly reach the desired room temperature and then slowing down to maintain the desired level.



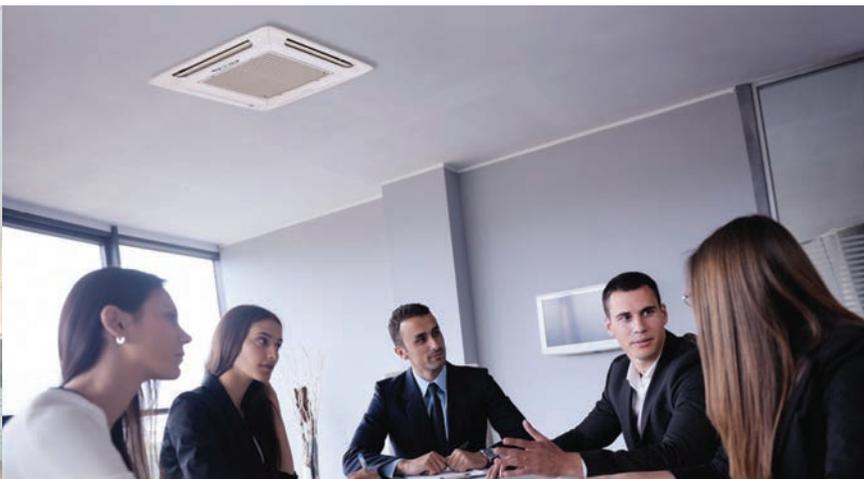
Far more efficient than single speed compressors, inverter technology reduces your operating costs.



Reduces compressor on/off cycling, extending the life of compressor components.



The Inverter Turbo Mode is capable of boosting the cooling or heating output for brief periods by up to 115% of the rated capacity under certain conditions, allowing for rapid temperature adjustment.



Single Zone & Multi-Zone Systems

Deluxe Heat Series HEAT PUMP ductless mini splits with inverter driven technology, offer year round cooling and heating comfort - ideal for residential and light commercial installations.

Single Zone Models

Btu/h	Indoor	Outdoor
	Model #	Model #
9,000	DHWAL09DA	DHSZ109DA
12,000	DHWAL12DA	DHSZ112DA
18,000	DHWAL18DA	DHSZ118DA
24,000	DHWAL24DA	DHSZ124DA

High Wall Air Handler



Multi-Zone Models

Btu/h	Outdoor	
	Model #	Zone
18,000	DHMZ218DA	2
27,000	DHMZ327DA	3
36,000	DHMZ436DA	4

(See page 11 for Multi-Zone combinations)

Outdoor Condenser



Features

- -22°F to 122°F Operating Range
- Low Ambient Heating Operation with 100% Heating Capacity at 0°F (DHSZ Models)
- Low Ambient Cooling with Built-in Low Ambient Controls
- ENERGY STAR®
- Condenser Chassis Heating Belt to Prevent Defrosting Water from Accumulating
- Turbo Mode - Boosts Compressor Capacity for Rapid Cooling or Heating
- Golden Fin Anti-corrosive Coating on the Condenser
- Compressor Heating Belt
- Anti-cold Air Function
- High Density Filter
- Automatically Detects Refrigerant Leaks

Additional Features

Enhanced Features

Compatible with after-market Wi-Fi® controllers.
(Contact your local sales representative for further details.)

Hand-held Remote Controller

Every Deluxe Heat System comes with an easy to use hand-held remote control so you can adjust your comfort level at the touch of a button.



- Enabling “Follow Me” Technology
When the “Follow Me” mode is activated, the system switches from the air handler mounted room temperature sensor, to the sensor inside of the infrared hand-held remote control. By doing this, the unit conditions to the space where you are with the remote close at hand.

- Enabling Timer Modes
Control a variety of settings with precision through the Timer Mode and never worry about arriving to a cold home again.

Auto Restart

If the system stops unexpectedly due to power failure, it will automatically restart with the previous function setting when power is restored.

Auto-Level Swing Louvers

The horizontal (long) discharge air louver blades can be adjusted to better circulate airflow for cooling or heating, which can be manually adjusted in 6° intervals or swing up or down automatically. Typically the blades raise during cooling and lower for heating.

24-Hour Timer

Set a wide variety of timer-based operations, start and stop at specific times, control fan speed as well as cool, heat, and auto from anywhere in the room.

Optional Wired Wall Thermostat

Instead of a hand-held remote control, the unit can be wired to a wall mounted thermostat.



DHSZ: Single Zone Ductless - Specifications and Performance

Outdoor Condensing Unit Model			DHSZ109DA	DHSZ112DA
Power Supply		Ph-V-Hz	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph
Cooling	Capacity	Btu/h	9000	12000
	EER	Btu/w	14.5	13
	SEER	Btu/w	25	22.5
Heating	Capacity @ 0°F	Btu/h	10260	11740
	COP	W/W	3.83	3.55
	HSPF4	Btu/w	11.2	12
	HSPF5	Btu/w	9	9.9
Nominal Heating at 47°F (8.3°C)	Capacity	Btu/h	15140	15140
Heating at 17°F (-8°C)	Rated Capacity	Btu/h	11408	12450
Heating at 0°F (-17°C)	Rates Capacity	Btu/h	10260	11740
Operating Range Ambient Temperature	Indoor (Cooling/Heating)	°C	17~32 / 0~30	17~32 / 0~30
		°F	62~90 / 32~86	62~90 / 32~86
	Outdoor (Cooling/Heating)	°C	-30~50 / -30~30	-30~50 / -30~30
		°F	-22~122 / -22~86	-22~122 / -22~86
MINIMUM CIRCUIT AMPACITY		A	9	9
MAX TIME DELAY FUSE/HARC BREAKER		A	15	15
Outdoor Air Flow		m3/h	1900	2000
		cfm	1120	1180
Outdoor Noise Level		dB(A)	55.5	56
Refrigerant type 410A/oz		oz	52.9	52.9
Refrigerant Precharge (total pipe length)		ft	25	25
Additional charge for each ft		oz	0.161	0.161
Design Pressure		psig	550/340 psig	550/340 psig
Refrigerant Piping	Liquid side/Gas side	inch	1/4" / 3/8"	1/4" / 1/2"
		mm	6.35mm / 9.52mm	6.35mm / 12.7mm
	Max. pipe length	m	25	25
		ft	82	82
	Max. difference in level	m	10	10
		ft	33	33

DHSZ: Single Zone Ductless - Specifications and Performance

Outdoor Condensing Unit Model			DHSZ118DA	DHSZ124DA
Power Supply		Ph-V-Hz	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph
Cooling	Capacity	Btu/h	17000	24000
	EER	Btu/w	12.5	13
	SEER	Btu/w	20	20.5
Heating	Capacity @ 0°F	Btu/h	18220	25720
	COP	W/W	3.13	2.81
	HSPF4	Btu/w	10.3	11.5
	HSPF5	Btu/w	8.8	9.6
Nominal Heating at 47°F (8.3°C)	Capacity	Btu/h	24700	30240
Heating at 17°F (-8°C)	Rated Capacity	Btu/h	19790	26340
Heating at 0°F (-17°C)	Rated Capacity	Btu/h	18220	25720
Operating Range Ambient Temperature	Indoor (Cooling/Heating)	°C	17~32 / 0~30	17~32 / 0~30
		°F	62~90 / 32~86	62~90 / 32~86
	Outdoor (Cooling/Heating)	°C	-30~50 / -30~30	-30~50 / -30~30
		°F	-22~122 / -22~86	-22~122 / -22~86
MINIMUM CIRCUIT AMPACITY		A	18	20
MAX TIME DELAY FUSE/HARC BREAKER		A	25	30
Outdoor Air Flow		m3/h	2300	4000
		cfm	1355	2355
Outdoor Noise Level		dB(A)	57.5	60
Refrigerant type 410A/oz		oz	0.161	0.322
Refrigerant Precharge (total pipe length)		ft	25	25
Additional charge for each ft		oz	0.161	0.322
Design Pressure		psig	550/340 psig	550/340 psig
Refrigerant Piping	Liquid side/Gas side	inch	1/4" / 1/2"	3/8" / 5/8"
		mm	6.35mm / 12.7mm	9.52mm / 15.9mm
	Max. pipe length	m	30	50
		ft	98	164
	Max. difference in level	m	20	25
		ft	66	82

DHMZ: Multi-Zone Ductless - Specifications and Performance

Outdoor Condensing Unit Model			DHMZ218DA	DHMZ327DA	DHMZ436DA
Power Supply		Ph-V-Hz	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph
Cooling	Capacity	Btu/h	19000	28000	36000
	EER	Btu	12.5	13	13.5
	SEER	Btu	21.5	22	21.5
Heating	Capacity @ 5°F	Btu/h	18080	26357	35175
	COP	W/W	3.4	3.5	3.8
	HSPF4		9.8	10.4	10.5
	HSPF5		8.5	9	8.5
Heating at 17°F (-8°C)	Rated Capacity	Btu/h	15210	22454	30134
Heating at 5°F (-15°C)	Rated Capacity	Btu/h	18080	26357	35175
Operating Range Ambient Temp.	Cooling	°C	-30~50	-30~50	-30~50
		°F	-22~122	-22~122	-22~122
	Heating	°C	-30~30	-30~30	-30~30
		°F	-22~86	-22~86	-22~86
MINIMUM CIRCUIT AMPACITY		A	25.0	30.0	35.0
MAX TIME DELAY FUSE/HARC BREAKER		A	35.0	45.0	50.0
Outdoor Air Flow		m3/h	3619	3619	7646
		cfm	2130	2130	4500
Outdoor Noise Level		dB(A)	63.4	62.3	64
Refrigerant type 410A/oz		oz	98.8	105.8	162.3
Refrigerant Precharge (total pipe length)		ft	49	74	98
Additional charge for each ft (liquid pipe)		oz	0.161 for 1/4" pipe 0.322 for 3/8" pipe	0.161 for 1/4" pipe 0.322 for 3/8" pipe	0.161 for 1/4" pipe 0.322 for 3/8" pipe
Design Pressure		psig	550/340	550/340	550/340
Refrigerant Piping	Liquid side lines Gas side lines	inch	(2) 1/4" liquid (2) 3/8" gas	(3) 1/4" liquid (3) 3/8" gas	(4) 1/4" liquid (3) 3/8" gas (1) 1/2" gas
		mm	(2) 6.35mm liquid (2) 9.52mm gas	(3) 6.35mm liquid (3) 9.52mm gas	(4) 6.35mm liquid (3) 9.52mm gas (1) 12.7mm gas
	Max. length for all rooms	m	40	60	80
		ft	131	197	262
	Max. length for one indoor unit	m	25	30	35
		ft	82	98	115
	Max. height diff. between indoor & outdoor units	m	15	15	15
		ft	49	49	49
	Max. height diff. between indoor units	m	10	10	10
		ft	33	33	33

DHWAL: Air Handlers Ductless - Specifications and Performance

Indoor Air Handler Model		DHWAL09DA	DHWAL12DA	DHWAL18DA	DHWAL24DA	
Power Supply	Ph-V-Hz	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph	
	Input	W	50	50	58	72
	Output	W	20	20	58	60
	RLA	A	0.036	0.036	0.4	0.23
Indoor Air Flow (Hi/Mi/Lo)	m3/h	628/445/333	631/466/366	901/697/501	1180/1060/824	
	cfm	370/268/196	371/274/198	530/410/295	695/624/485	
Indoor Noise Level (Hi/Mi/Lo)	dB(A)	41.7/33.4/26.5	45.1/35.8/28.6	46.2/36.3/30.9	51.7/44.5/35.1	
Thermostat Type		Remote Control	Remote Control	Remote Control	Remote Control	
Thermostat Setting Range	Indoor (Cooling/ Heating)	°C	17~32 / 0~30	17~32 / 0~30	17~32 / 0~30	17~32 / 0~30
		°F	62~90 / 32~86	62~90 / 32~86	62~90 / 32~86	62~90 / 32~86

Multi-Zone Combinations

Air Handlers Combinations, per Condenser Model			
Model #	2-Zone	3-Zone	4-Zone
DHMZ218DA	9K + 9K		
	9K + 12K		
	12K + 12K		
DHMZ327DA	9K + 9K	9K + 9K + 9K	
	9K + 12K	9K + 9K + 12K	
	9K + 18K	9K + 12K + 12K	
	12K + 12K	9K + 9K + 18K	
	12K + 18K	12K + 12K + 12K	
	18K + 18K		
DHMZ436DA	9K + 9K	9K + 9K + 9K	9K + 9K + 9K + 9K
	9K + 12K	9K + 9K + 12K	9K + 9K + 9K + 12K
	9K + 18K	9K + 9K + 18K	9K + 9K + 9K + 18K
	9K + 24K	9K + 12K + 12K	9K + 9K + 12K + 12K
	12K + 12K	9K + 12K + 18K	9K + 9K + 12K + 18K
	12K + 18K	9K + 18K + 18K	9K + 12K + 12K + 12K
	12K + 24K	12K + 12K + 12K	12K + 12K + 12K + 12K
	18K + 18K	12K + 12K + 18K	
		12K + 12K + 24K	
		12K + 18K + 18K	

Note: If total indoor units load exceeds nominal capacity of outdoor unit, the practical output capacity of every indoor unit will be correspondingly attenuated. This situation is very evident during heating mode.

Deluxe heat

Single-Zone and Multi-Zone Ductless Split Systems

For complete product information, please refer to individual unit specifications, installation and operation manual, and other product literature found on www.emiretroaire.com.



Deluxe Heat Ductless Systems come with a limited 3-year parts warranty and 10-year compressor warranty.

Extended Warranty Program is available for purchase:
additional 31st day to 10th year labor, and 3rd to 10th year parts.
(Plan is administered by Trinity Warranty LLC*)

*Unit must be registered within 60 days from the date of original installation.
All terms of Trinity Extended Service Agreement apply.